City of Phoenix - Skunk Creek Landfill
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January 23, 2003

Permit Conditions
City of Phoenix - Skunk Creek Landfill
V97-019
January 23, 2003

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under Section 304 of the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

GENERAL CONDITIONS:

1. **AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]
The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or State Implementation Plan (SIP) Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).

2. **CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4(b)]
The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.

3. **CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:**
[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e]
Any application form, report, or compliance certification submitted under the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

4. COMPLIANCE:

A. COMPLIANCE REQUIRED:

1) The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only]

[County Rule 210 §§301.8b(4) & 302.1h(1)]

2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.

[County Rule 210 §302.1h(2)]

3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.

[County Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.1]

Compliance with the RACT requirements of this Permit Condition for nitrogen oxides (NO_x) shall not be required if a waiver granted by the Administrator under Section 182 (f) of the Clean Air Act is in effect.

4) For any major source operating in a nonattainment area designated as serious for PM_{10}, for which the source is classified as a major source for PM_{10}, the source shall comply with the best available control technology (BACT), as defined in County Rule 100.

[County Rule 210 §302.1(h)(7)]

B. COMPLIANCE CERTIFICATION REQUIREMENTS:

[County Rule 210 §305.1d]

The Permittee shall file an annual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

1) The identification of each term or condition of the permit that is the basis of the certification;
2) The compliance status;
3) Whether compliance was continuous or intermittent;
4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

5) Other facts as the Control Officer may require to determine the compliance status of the source.

The annual certification shall be filed at the same time as the second semiannual monitoring report required by the Specific Condition section of these Permit Conditions and every 12 months thereafter.

C. COMPLIANCE PLAN: [County Rule 210 §305.1g]
Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the release date of the proposed conditions for this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only]

5. CONFIDENTIALITY CLAIMS: [County Rule 100 §402] [County Rule200 §411]
Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) which:

A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.
The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

If the Permittee submits information with an application under a claim of confidentiality under ARS 49-487 and County Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:
NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.

A. ACID RAIN: [County Rule 210 §§302.1b(2) & 302.1f] [County Rule 371 §301]

1). Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the CAA and incorporated under County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.

2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds under Title IV of the CAA or the regulations promulgated thereunder and incorporated under County Rule 371.

a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired under the acid rain program and incorporated under County Rule 371, provided that such increases do not require a permit revision under any other applicable requirement.

b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.

c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the CAA.

d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit under County Rule 371:

(1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.

(2) Exceedances of applicable emission rates.

(3) The use of any allowance prior to the year for which it was allocated.

(4) Violation of any other provision of the permit.

B. ASBESTOS:

[40 CFR 61, Subpart M] [County Rule 370 §301.8 - locally enforceable only]

The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

C. RISK MANAGEMENT PLAN (RMP): [40 CFR 68]

Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in 40 CFR Section 68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

D. STRATOSPHERIC OZONE PROTECTION: [40 CFR 82 Subparts E, F, and G]

If applicable, the Permittee shall follow the requirements of 40 CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices under 40 CFR 82.156.

2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician under 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION: [County Rule 210 §301.6]
If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

8. EMERGENCY EPISODES: [County Rule 600 §302] [SIP Rule 72.A.5. e, f & g]
If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302.

9. EMERGENCY PROVISIONS: [County Rule 130 §§201 & 402]
An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

A. An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
B. At the time of the emergency, the permitted source was being properly operated;
C. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
D. The Permittee as soon as possible telephoned the Control Officer, giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210 §302.1.e(2) with respect to deviation reporting. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

10. EXCESS EMISSIONS: [County Rule 140 §§103, 401 & 402] [locally enforceable only]
NOTE: This Permit Condition is based on a County Rule which has not been approved as part of the State Implementation Plan and is therefore applicable only at the County level. There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions. The definition of excess emissions can be found in County Rule 100 §200.

A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:

1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;
3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);
4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection 308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.

B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:

1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;

4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
9) All emissions monitoring systems were kept in operation, if at all practicable; and
10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.

C. Affirmative Defense For Startup And Shutdown:

1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
   a. The excess emissions could not have been prevented through careful and prudent planning and design;
   b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
   c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
   d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
   e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
   f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
   g. All emissions monitoring systems were kept in operation, if at all practicable; and
   h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.

2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.

D. Affirmative Defense For Malfunctions During Scheduled Maintenance: If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph A. of this Permit Condition.

E. Demonstration Of Reasonable And Practicable Measures: For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.

11. FEES: [County Rule 200 §409] [County Rule 210 §§302.1i & 401]
The Permittee shall pay fees to the Control Officer under ARS 49-480(D) and County Rule 280.

12. MODELING: [County Rule 200 §407] [locally enforceable only]
Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

13. MONITORING / TESTING:

A. The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with County Rule 200 §309.
[County Rule 200 §309] [SIP Rule 41]

B. Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established under the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the applicable Rule, the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.
[County Rule 200 §408] [County Rule 210 §302.1.c] [County Rule 270 §§300 & 400] [SIP Rule 27]

C. The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:

1) Sampling ports adequate for test methods applicable to such source.
2) Safe sampling platform(s).
3) Safe access to sampling platforms(s).
4) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

14. PERMITS:

A. BASIC: [County Rule 210 §302.1h(3)]

This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

B. DUST CONTROL PLAN REQUIREMENTS:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction and revegetation, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

1) The Permittee must first submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan before commencing any routine dust generating operation.

[County Rule 310 §303.3] [SIP Rule 310 §303.3]

2) A Dust Control Plan shall not be required to play on a ball field and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.

[County Rule 200 §305] [County Rule 310 §303.4] [SIP Rule 310 §303.4]

3) Any Dust Control Plan shall, at a minimum, contain all the information described in Section 304 of Rule 310.

[County Rule 310 §304] [SIP Rule 310 §304]

4) Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times

[County Rule 310 §303] [SIP Rule 310 §303]

C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

[County Rule 200 §§301 & 308] [County Rule 210 §§301.4a, b, c, & 400]

1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.

2) The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.

[County Rule 210 §§303.1a, 303.2, 405.4, & 406.4]

3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

4) No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[County Rule 210 §302.1j]

D. POSTING:

1) The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 §311] [SIP Rule 22F]

2) If a Dust Control Plan, as required by Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.

[County Rule 310 §401] [SIP Rule 310 §401]

E. PROHIBITION ON PERMIT MODIFICATION: [County Rule 200 §310]

The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

F. RENEWAL: [County Rule 210 §§301 & 302]

1) The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §§301 & 302.3.

[County Rule 210 §§301.2a, 301.4a, b, c, d, h & 302.3]

2) The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, ARS and County Rules.

[County Rule 200 §§308 & 309] [County Rule 210 §301.1]

3) The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

4) If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rule 200 §403.2] [County Rule 210 §§301.4f & 301.9]

G. REVISION / REOPENING / REVOCATION:

1) This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

[County Rules 200 §402.1]

Any permit revision required under this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal *(Note: this includes a facility wide application and public comment on the entire permit)* and shall reset the five year permit term.

[County Rules 200 §402.1a(1) & 210 §302.5]

2) This permit shall be reopened and revised under any of the following circumstances:

a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.

b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.G.2, shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

3) This permit shall be reopened by the Control Officer and any permit shield revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 §407.3]

4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[County Rule 210 §302.1h(3)]

H. REVISION UNDER A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c] [locally enforceable only]

If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

I. REQUIREMENTS FOR A PERMIT:

1) Air Quality Permit: Except as noted under the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

2) Earthmoving Permit:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Non-routine activities, such as construction and revegetation, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

No person shall commence any earth moving operation or any dust generating operation without meeting the requirements of and obtaining any and all Earth Moving Equipment Permits and Permits to Operate required by County Rule 200. The provisions of this section shall not apply:

a) During emergency, life threatening situations or in conjunction with any officially declared disaster or state of emergency;

b) To operations conducted by essential service utilities to provide electricity, natural gas, oil and gas transmission, cable television, telephone, water, and sewerage during service outages and emergency disruptions;

c) To non-routine or emergency maintenance of flood control channels and water retention basins.

d) To vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality and/or commercial acceptance. Such facilities and operations shall be exempted from the provisions of this section only if such testing is not feasible within enclosed facilities.

[County Rule 310 §302] [SIP Rule 310 §302]

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 §305]

3) Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 §§302.1 and 302.2.

[County Rule 314] [County Rule 200 §306] [SIP Rule 314]

J. RIGHTS AND PRIVILEGES: [County Rule 210 §302.1h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

K. SEVERABILITY: [County Rule 210 §302.1g]

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

L. SCOPE:

The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 §308] [SIP Rule 22H]

Nothing in this permit shall alter or affect the following:

1) The provisions of Section 303 of the Act (Emergency Orders), including the authority of the Administrator of the USEPA under that section.
2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee under Section 114 of the Act, or any provision of State law.
5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]

[County Rule 210 §407.2]

M. TERM OF PERMIT: [County Rule 210 §§302.1a & 402]
This Permit shall remain in effect for no more than 5 years from the date of issuance.

N. TRANSFER: [County Rule 200 §404]
Except as provided in ARS 49-429 and County Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures under County Rule 210.

15. RECORDKEEPING:

A. RECORDS REQUIRED:
[County Rule 100 §501] [County Rule 310 §502] [SIP Rule 40 A]
The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced, and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

B. RETENTION OF RECORDS:
Unless a longer time frame is specified by these Permit Conditions, information and records required by applicable requirements and copies of summarizing reports recorded by the Permittee and submitted to the Control Officer shall be retained by the Permittee for 5 years after the date on which the information is recorded or the report is submitted. [County Rule 100 §504] [SIP Rule 40 C]

The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
[County Rule 210 §§302.1d(2)]

C. MONITORING RECORDS: [County Rule 210 §§302.1d(1) & 305.1b(1)]
Records of any monitoring required by this Permit shall include the following:
1) The date, place as defined in the permit, and time of sampling or measurements;
2) The date(s) analyses were performed;
3) The name of the company or entity that performed the analysis;
4) The analytical techniques or methods used;
5) The results of such analysis; and
6) The operating conditions as existing at the time of sampling or measurement.

D. RIGHT OF INSPECTION OF RECORDS: [County Rule 100 §106] [SIP Rule 40 D]
When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and

other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

16. REPORTING:

NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

A. ANNUAL EMISSION INVENTORY REPORT:

[County Rule 100 §505] [SIP Rule 40 B]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30, or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01, ARS §49-480.03 and ARS §49-480.04.

B. DATA REPORTING: [County Rule 100 §502]

When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency, and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

C. DEVIATION REPORTING: [County Rule 210 §§302.1e & 305.1c]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The Permittee shall submit the report to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days from knowledge of the deviation. The report shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

D. EMERGENCY REPORTING: [County Rule 130 §402.4]

(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report.)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:
[County Rule 100 §503]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO_x and volatile organic compounds (VOC) from that source. At a minimum, the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.

F. EXCESS EMISSIONS REPORTING:
[County Rule 140 §500] [locally enforceable only]

(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)

1) The owner and/or operator of any source shall report to the Control Officer any emissions in excess of the limits established by the County or SIP Rules or by these Permit Conditions. The report shall be in two parts as specified below:
   a) Notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from paragraph 2) of this Permit Condition.
   b) Detailed written notification by submission of an excess emissions report within 72 hours of the notification required by paragraph 1) a) of this Permit Condition.

2) The excess emissions report shall contain the following information:
   a) The identity of each stack or other emission point where the excess emissions occurred;

b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
c) The time and duration or expected duration of the excess emissions;
d) The identity of the equipment from which the excess emissions emanated;
e) The nature and cause of such emissions;
f) The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
g) The steps that were or are being taken to limit the excess emissions; and
h) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the Permit procedures.

3) In the case of continuous or recurring excess emissions, the notification requirements of this Permit Condition shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to paragraphs 1) and 2) of this Permit Condition.

G. OTHER REPORTING: [County Rule 210 §302.1h(5)]
The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator of the USEPA along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:
[County Rule 100 §105] [County Rule 210 §305.1f] [SIP Rule 43]
The Control Officer, during reasonable hours, for the purpose of enforcing and administering County Rules or any provision of ARS relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

E. To record any inspection by use of written, electronic, magnetic, and photographic media.

[Locally enforceable only]

SPECIFIC PERMIT CONDITIONS:

18. ALLOWABLE EMISSIONS:

A. The Permittee shall not allow emissions from the flares into the atmosphere to exceed any of the following limits:

Pollutant Category	**Twelve Month Rolling Total**
Particulates (TSP)	39 Tons
Particulates smaller than 10 Microns (PM_{10})	24 Tons
Non-Methane Organic Compounds (NMOCs)	30.5 Tons
Carbon Monoxide (CO)	95 Tons
Nitrogen Oxides (NO_x)	31.5 Tons

The twelve-month rolling total shall be calculated at the end of each calendar month by summing the total emissions over the most recent 12 calendar months.

[County Rule 200 §309]

B. The Permittee shall not allow emissions from the flare system to exceed any of the following limits:
   1) 0.041 pounds of oxides of nitrogen (measured as NO_2) per million British Thermal Units of Landfill gas (0.041 lbs/MMBTU).
   2) 0.13 pounds of carbon monoxide (CO) per million British Thermal Units of Landfill gas (0.13 lbs/MMBTU)

[County Rule 210 §301.4.b]

C. The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity, except as provided in County Rule 300§302.

[County Rule 300§301][Locally enforceable only]

D. Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30]

E. The Permittee shall not allow visible fugitive dust emissions to exceed 20% opacity. Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:
   1) All control measures required were followed and one or more of the control measures listed below were applied and maintained;
      a) Cease dust-generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
      b) Apply water or other suitable dust suppressant twice per hour; or
      c) Apply water as necessary to maintain a soil moisture content at a minimum of 12% as determined by ASTM Method D2216-98 or other

equivalent as approved by the Control Officer and the Administer of EPA. For areas which have an optimum moisture content for compaction of less than 12% as determined by ASTM Method D1557-91(1998) or other equivalent as approved by the Control Officer and the Administer of EPA, maintain at least 70% of the optimum soil moisture content.

2) The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
3) The Permittee compiled and retained records, in accordance with Recordkeeping requirements of this permit; and
4) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301 and Table 2]
[County SIP Rule 310 §301 and Table 2]

F. The Permittee shall not emit into the ambient air any sulfur oxide or sulfuric acid in such manner and amounts as to result in ground level concentrations at any one place beyond the premises on which the source is located exceeding those limits shown in the following table:

Table 1: SO_x Emission Limits

Concentration of SO_x	Averaging Time
850μg/m^3	1 hour
250μg/m^3	24 hour
120μg/m^3	72 hour

[County SIP Rule 32]

G. The Permittee shall not emit hydrogen sulfide (H_2S) from any location in such a manner or amount that the concentration of such emissions in the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume (ppm_v) for any averaging period of 30 minutes or more.

[County Rule 320 §304]

19. OPERATIONAL LIMITATIONS/STANDARDS:

A. Control Device Parameters for Flare System:

1) Filter/condensate knockout drums

All landfill gas from field gas collection systems shall pass through the filter/condensate knockout drums having a control efficiency of 95% by weight for particulates of 10 microns or above as certified by the filter manufacturer.

2) All landfill gas passing through the gas collection system shall pass through a properly functioning flare system. The flare system shall be operated at a minimum temperature of 1400°F and shall have a maximum landfill gas inlet flow rate equal to the design capacity as shown in the attached equipment list in Appendix A of these permit conditions. The flare system shall have at least 90% destruction efficiency by weight for NMOCs. (If a lower temperature is to be used, it must first be demonstrated through testing that the lower temperature produces at least a 90% destruction efficiency for NMOCs, with a carbon monoxide concentration of less than 100 parts per million by volume at the outlet.)

[County Rule 200 §309][Locally enforceable only]

B. The Permittee's active collection system shall meets the following requirements:

1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:

a) 5 years or more if active; or

b) 2 years or more if closed or at final grade.

3) Collect gas at a sufficient extraction rate;

4) Be designed to minimize off-site migration of subsurface gas.

[40 CFR 60 §752 (b)(2)(ii)(A) *(1)* through *(4)*]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

C. The Permittee's passive collection system shall meet the following requirements:

Comply with the provisions specified in 40 CFR 60 §§752(b)(2)(ii)(A)*(1), (2)*, and (2)(ii)(A)*(4)*.

Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 60 §258.40.

[40 CFR 60 §752 (b)(2)(ii)(B)]

D. Route all the collected gas to a control system that complies with one of the following requirements.

1) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight-percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen.

The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60 §756(b).

2) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR 60§752 (b)(2)(iii)(A) or (B).

[40 CFR 60 §752 (b)(2)(iii)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

E. Operate the collection and control device installed to comply with 40 CFR Part 60 §752 in accordance with the provisions of 40 CFR 60 §753, 40 CFR 60 §755 and 40 CFR 60 §756.

[40 CFR 60 §752 (b)(2)*(iv)*]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

F. The collection and control system may be capped or removed provided that all the following conditions of these Permit Conditions are met:

1) The landfill shall be a closed landfill as defined in 40 CFR 60 §§751. A closure report shall be submitted to the Administrator and Control Officer as provided in 40 CFR 60 §757(d);
2) The collection and control system shall have been in operation a minimum of 15 years; and
3) Following the procedures specified in 40 CFR 60 §754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

[40 CFR 60 §752(b)(2)(iv)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

G. The Permittee of an active collection and control system used to comply with the provisions of 40 CFR 60 §752(b)(2)(ii) shall meets the following requirements:

1) Operate the collections system such that the gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
   a) 5 years or more if active; or
   b) 2 years or more if closed or at final grade;

[40 CFR 60 §753 (a)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

2) Operate the collection system with negative pressure at each wellhead except under the following conditions:
   a) A fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60 §757(f)(1);
   b) Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the design plan;

c) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator and the Control Officer;

[40 CFR 60 §753 (b)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

3) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55ºC and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

[40 CFR 60 §753 (c)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

a) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 CFR 60 §752(b)(2)(i).

[40 CFR 60 §753 (c)(1)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

b) Unless an alternative test method is established as allowed by 40 CFR 60 §752(b)(2)(i) of 40 CFR 60 §§750 through 759, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
   (1) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
   (2) A data recorder is not required;
   (3) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
   (4) A calibration error check is not required;
   (5) The allowable sample bias, zero drift, and calibration drift are ±10 percent.

[40 CFR 60 §753 (c)(2)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

4) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface to the landfill. To determine if this level is exceeded, the Permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The Permittee may establish an alternative-traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas

with steep slopes or other dangerous areas may be excluded from the surface testing.

[40 CFR 60 §753 (d)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

5) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60 §752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and

[40 CFR 60 §753 (e)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

6) Operate the control or treatment system at all times when the collected gas is routed to the system.

[40 CFR 60 §753 (f)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

7) If monitoring demonstrates that the operational requirements in paragraphs (b), (c), or (d) of 40 CFR 60 §753 are not met, corrective action shall be taken as specified in 40 CFR 60 §755(a)(3) through (5) or 40 CFR 60 §755(c). If corrective actions are taken as specified in 40 CFR 60 §755, the monitored exceedance is not a violation of the operational requirements of 40 CFR 60 §753.

[40 CFR 60 §753 (g)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

H. If a positive pressure exists at the gas collection header, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR 60 §753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator and Control Officer for approval.

[40 CFR 60 §755 (a)(3)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

I. The Permittee is not required to expand the collection system as required in 40 CFR 60.755(a)(3) during the first 180 days after gas collection system startup.

[40 CFR 60 §755(a)(4)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

J. If a well exceeds one of the operating parameters listed in 40 CFR 60.755(a)(5), action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator and Control Officer for approval.

[40 CFR 60 §755 (a)(5)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

K. For purposes of compliance with 40 CFR 60 §753(a), the Permittee shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60 §752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

1) 5 years or more if active; or
2) 2 years or more if closed or at final grade.

[40 CFR 60 §755 (b)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

L. The Permittee seeking to comply with 40 CFR 60 §752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60 §755(a)(3);
2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60 §755(a)(5);
3) Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60 §755(a)(5).

[40 CFR 60 §756 (a)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

M. The Permittee seeking to comply with 40 CFR 60 §752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater.
2) A device that records flow to or bypass of the control device. The Permittee shall either:
   a) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
   b) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[40 CFR 60 §756 (b)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

N. The Permittee seeking to demonstrate compliance with 40 CFR 60 §755(c) shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60 §755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[40 CFR 60 §756 (f)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

O. The Permittee shall comply with the collection and control system design plan approved by the Department, including the elements listed in 40 CFR 60.759: alternate operating scenario(s), test methods, procedures, compliance measures, monitoring, recordkeeping and/or reporting provisions of 40 CFR 60 §§753 through 758.

[40 CFR §60.759]

P. Operational Requirements for Fugitive Dust Sources

1) Stabilization Requirements

a) The Permittee shall not allow visible dust emissions from unpaved Haul/Access Road and unpaved parking lots to exceed 20% opacity and either;

1) shall not allow silt loading equal to or greater than 0.33 oz/ft^2;
2) shall not allow the silt content to exceed 6%

b) The Permittee shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road, limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. If complying with subsection 302.2(b) of County Rule 310, the Permittee must include, in the Dust Control Plan, the number of vehicles traveled on the unpaved haul/access road (i.e. number of employee vehicles, earthmoving equipment, haul trucks and water trucks)

[County Rule 310 §302.2]
[County SIP Rule 310 §302.2]

2) Control Measures: The Permittee shall implement control measures before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. See subsection 304.3, Table 1 and Table 2 of County Rule 310. For the purpose of these Permit Conditions, any control measure that is implemented must meet the applicable standard(s) described in County Rule 310§301 and §302, as determined by the corresponding test method(s), as applicable, and must meet other applicable standard(s) set forth in County Rule 310. Failure to comply with the provision of County Rule 310 §308 (Work Practices), as applicable, and/or of an approved Dust Control Plan, is deemed a violation of this Permit.

[County Rule 310 §306]
[County SIP Rule 310 §306]

3) Should any primary control measures(s) in an approved Dust Control Plan prove ineffective, the Permittee shall immediately implement the contingency control measure, which may obviate the requirement of submitting a revised Dust Control Plan. Any control measure that is implemented must meet the applicable standards described in these permit conditions, as determined by the corresponding test method(s), as applicable, and must meet other applicable standards set forth in County Rule 310.

[County Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]
[County SIP Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

4) Work Practices: The Permittee shall comply with the following work practices.

[County Rule 310 §308 and Table 1]
[County SIP Rule 310 §308][County SIP Rule 31]

a) Bulk material transport, hauling, handling and open storage piles;
   (1) Bulk Material Hauling/Transporting **Off-Site** Onto Paved Public Roadways
      (a) Load all haul trucks such that the freeboard is not less than three inches;
      (b) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s);
      (c) Cover all haul trucks with a tarp or other suitable closure;
      (d) Before the empty haul truck leaves the site, clean the interior of the cargo compartment or cover the cargo compartment.
   (2) Bulk Material Hauling/Transporting On-Site Within The Boundaries Of The Work Site: When crossing a public roadway upon which the public is allowed to travel while construction is underway:
      (a) Load all haul trucks such that the freeboard is not less than three inches; and
      (b) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
      (c) Install a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site. Examples of trackout control devices are described in Table 1 (Trackout-1J, 2J, 3J) of Maricopa County Rule 310.
   (3) When **On-Site** Hauling/Transporting Within The Boundaries Of The Work Site But **Not Crossing A Public Roadway** Upon Which The Public Is Allowed To Travel While Construction Is Underway:
      (a) Limit vehicular speeds to 15 miles per hour or less while traveling on the work site; or
      (b) Apply water to the top of the load such that the 20% opacity standard, as described in Section 301 of Maricopa County

Rule 310, is not exceeded, or cover haul trucks with a tarp or other suitable closure.

(4) Bulk Material Handling Operations And Open Storage Piles:

(a) During Stacking, Loading, And Unloading Operations apply water as necessary, to maintain compliance with Rule 310 Section 301; and

(b) When Not Conducting Stacking, Loading, And Unloading Operations:

(i) Cover open storage piles with tarps, plastic, or other material to prevent wind from removing the coverings; or

(ii) Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98, or other equivalent as approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91(1998) or other equivalent approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content; or

(iii) Meet the stabilization requirements described in Rule 310 Section 302.3; or

(iv) Construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%. If implementing permit condition 19 P 1 d 4, must also implement permit condition 19 P 1 d 2 or permit condition 19 P 1 d 3 above.

(5) Open Storage Piles:

For the purpose of this rule, an open storage pile is any accumulation of bulk material with a 5% or greater silt content which in any one point attains a height of three feet and covers a total surface area of 150 square feet or more. Silt content shall be assumed to be 5% or greater unless a person can show, by testing in accordance with ASTM Method C136-96A or other equivalent method approved in writing by the Control Officer and the Administrator of EPA, that the silt content is less than 5%.

(6) Spillage, Carry-Out, Erosion, And/Or Trackout:

(a) Install a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site at all exits onto a paved public roadway *(Examples of trackout control devices are described in Table 1 (Trackout-1J, 2J, 3J) of Maricopa County Rule 310)*:

(i) From all work sites with a disturbed surface area of five acres or larger.

(ii) From all work sites where 100 cubic yards of bulk materials are hauled on-site and/or off-site per day.

(b) Cleanup spillage, carry-out, erosion, and/or trackout on the following time-schedule:

(i) Immediately, when spillage, carry-out, and/or trackout extends a cumulative distance of 50 linear feet or more; or

(ii) At the end of the workday, when spillage, carry-out, erosion, and/or trackout are other than the spillage, carry-out, erosion, and/or trackout described above, in Maricopa County Rule 310 Section 308.3(b)(1).

(7) Unpaved Parking Lots: The Permittee shall implement one or more of the following control measures:

(a) Pave.

(b) Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with subsection 302.1 of Maricopa County Rule 310.

(c) Apply a suitable dust suppressant, in compliance with subsection 302.1 of Maricopa County Rule 310.

(8) Earthmoving Operations On Disturbed Surface Areas 1 Acre Or Larger: If water is the chosen control measure, operate water application system (e.g., water truck) while conducting earthmoving operations on disturbed surface areas 1 acre or larger.

(9) Vehicle Use In Open Areas And Vacant Lots: The Permittee shall implement one or more of the following control measures:

(a) Restrict trespass by installing signs.

(b) Install physical barriers such as curbs, fences, gates, posts, signs, shrubs, and/or trees to prevent access to the area.

Q. The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[SIP Rule 32A]
[County Rule 320 § 300]

R. Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalizes, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[County Rule 320 §302]

S. Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[County Rule 320 §303] [locally enforceable only]

T. Operational Limitations and Standards for Solvent Cleaning:

1) The Permittee shall meet the following solvent handling requirements:

a) All cleaning-solvent, including solvent soaked materials, shall be kept in closed leak-free containers that are opened only when adding or removing materials. Rags used for wipe cleaning shall be stored in closed containers when not in use. Each container shall be clearly labeled with its contents.

b) If a cleaning-solvent escapes from a container:

(1) Wipe up or otherwise remove immediately if in accessible areas.

(2) For areas where access in not feasible during normal production, remove as soon as reasonably possible.

c) Unless records show that VOC-containing cleaning material was sent offsite for legal disposal, it will be assumed that it evaporated on site.

[County Rule 331 §301]

2) All Cleaning Machines Shall Be One Of The Following Types:

a) Batch loaded cold cleaners with remote reservoir;

b) Batch loaded cold cleaners without a remote reservoir (such as solvent dip tank);

c) Shall use only low VOC cleaner (A low VOC cleaner is any solution or homogeneous suspension that, as used, contains less than 50 grams of VOC per liter of material (0.42 lb VOC/gal) or is at least 95% water by weight or volume as determined by an applicable test method in Section 502 of County Rule 331); OR

d) A sealed system. A sealed system is one that meets all of the following requirements:

(1) Is an airtight or airless cleaning system which is operated according to the manufacturer's specifications and, unless otherwise indicated by the manufacturer, meets all of the following requirements:

(2) Has a door or other pressure-sealing apparatus that is shut during each cleaning and drying cycle.

(3) Has a differential pressure gauge that always indicates the pressure in the sealed chamber when occupied or in active use.

(4) Any associated pressure relief device(s) shall be so designed and operated as to prevent liquid cleaning-solvents from draining out.

[County Rule 210 §302.1]

3) Equipment Requirements For All Cleaning Machines:

a) The Permittee shall provide a leakfree container (degreaser) for the solvents and the articles being cleaned.

(1) The VOC-containment portion shall be impervious to VOC-containing liquid and vapors.

(2) No surface of any freeboard required by County Rule 331 shall have an opening or duct through which VOC can escape to the atmosphere except as required by OSHA.

[County Rule 331 §302.1] [SIP Rule 331 §301]

b) The Permittee shall maintain and operate all cleaning machine equipment required by County Rule 331 and any of its emission controls required by County Rule 331.

[County Rule 331 §302.2] [SIP Rule 331 §306.1]

c) The Permittee shall not dispose of any solvent, including waste solvent, in such a manner as will cause or allow its evaporation into the atmosphere. Records of its disposal/recovery shall be kept in accordance with hazardous waste disposal statutes.

[SIP Rule 331 §306.4]

4) Specific Operating & Signage Requirements For Cleaning Machines

a) The Permittee shall conform to the following operating requirements when cleaning with cleaning-solvents other than Low-VOC Cleaners:

(1) Comfort fans shall not be used near cleaning machines;

(2) Do not remove any device designed to cover the solvent unless processing work in the cleaning machine or maintaining the machine;

(3) Drain cleaned parts for at least (15) fifteen seconds after cleaning or until dripping ceases, whichever is later;

(4) If using a cleaning-solvent spray system:

(a) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).

(b) Pressure at the orifice from which the solvent emerges shall not exceed (10) ten psig and shall not cause liquid solvent to splash outside the solvent container.

(c) In an in-line cleaning machine, a shower-type spray is allowed, provided that the spraying is conducted in a totally confined space that is separated from the environment.

(d) Exceptions to the foregoing subsections a), b), and c) are provided for in Special Non-vapor Cleaning Situations in the section titled the same below.

(5) The Permittee shall not cause agitation of a cleaning-solvent in a cleaning machine by sparging with air or other gas. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds (15) fifteen seconds;

(6) The Permittee shall not place porous or absorbent materials in or on a cleaning machine. This includes, but is not limited to, cloth, leather, wood, and rope. No object with a sealed wood handle, including a brush, is allowed;

(7) The ventilation rate at the cleaning machine shall not exceed 65 cfm per square foot of evaporative surface (20 $m^3/min/m^2$), unless that rate must be changed to meet a standard specified and certified by a Certified Safety Professional, a Certified Industrial Hygienist, or a licensed professional engineer experienced in ventilation, to meet health and safety requirements;

(8) Limit the vertical speed of mechanical hoists moving parts in and out of the cleaning machine to a maximum of 2.2 inches per second and (11) eleven ft/min (3.3 m/min);

(9) The Permittee shall prevent cross contamination of solvents regulated by Section 304 of Rule 331 with solvents that are not so regulated. Use signs, separated work-areas, or other effective

means for this purpose. This includes those spray gun cleaning solvents that are regulated by another rule.

[County Rule 331 §303.1] [SIP Rule 331 §306]

b) When using cleaning-solvent, other than Low-VOC Cleaner, in any solvent cleaning machine (degreaser) or dip tank, the Permittee shall provide the following signage requirements on the machine, or within 3¼ feet (1 meter) of the machine, a permanent, conspicuous label, or placard which includes, at a minimum, each of the following applicable instructions, or its equivalent:
   (1) "Keep cover closed when parts are not being handled." (This is not required for remote reservoir cleaners.)
   (2) "Drain parts until they can be removed without dripping."
   (3) "Do not blow off parts before they have stopped dripping."
   (4) "Wipe up spills and drips as soon as possible; store used spill rags [or 'wiping material'] in covered container."
   (5) "Don't leave cloth or any absorbent materials in or on this tank."
   (6) For cleaning machines with moving parts such as hoists, pumps, or conveyors, post: "Operating instructions can be obtained from _____" where the Permittee shall list a person or place where the instructions are available.

[County Rule 331 §303.2] [SIP Rule 331 §306]

5) Solvent Specification:
   a) All cleaning solvents, except Low-VOC Cleaners, shall be conforming solvents. A conforming solvent is one which has a total VOC vapor pressure at 68ºF (20ºC) not exceeding 1 millimeter of mercury column maximum total VOC vapor pressure.
   b) A nonconforming solvent may be used if it is utilized in a sealed system.

[County Rule 331 §304]

6) Batch Cleaning Machines
   a) The Permittee shall equip each batch cleaning machine with remote reservoir, including the cabinet type(s), with the following:
      (1) A sink-like work area or basin which is sloped sufficiently towards the drain so as to prevent pooling of cleaning-solvent.
      (2) A single, unimpeded drain opening or cluster of openings served by a single drain for the cleaning-solvent to flow from the sink into the enclosed reservoir. Such opening(s) shall be contained within a contiguous area not larger than 15.5. square inches (100 cm^2).
      (3) Provide a means for drainage of cleaned parts such that the drained solvent is returned to the cleaning machine.

   [County Rule 331 §305.1] [SIP Rule 331 §302.1]
   b) The Permittee shall equip each batch cleaning machine without a remote reservoir with all of the following:
      (1) Have and use an internal drainage rack or other assembly that confines within the freeboard all cleaning-solvent dripping from parts and returns it to the hold of the cleaning machine (degreaser).
      (2) Have an impervious cover which when closed prevents cleaning-solvent vapors in the cleaning machine from escaping into the air/atmosphere when not processing work in the cleaning machine. The cover shall be fitted so that in its closed position the cover is

between the cleaning-solvent and any lip exhaust or other safety vent, except that such position of cover and venting may be altered by an operator for valid concerns of flammability established in writing and certified to by a Certified Safety Professional or a Certified Industrial Hygienist to meet health and safety requirements.

(3) The freeboard height shall be not less than 6 inches (15.2 cm). Freeboard height for batch cleaning machines is the vertical distance from the solvent/air interface to the least elevated point of the top-rim when the cover is open or removed, measured during idling mode.

(4) The freeboard zone shall have a permanent, conspicuous mark that locates the maximum allowable solvent level which conforms to the applicable freeboard requirements.

[County Rule 331 §305.2] [SIP Rule 331 §302.2]

7) Special Non-Vapor Cleaning Situations

a) The Permittee shall operate and equip the devices as follows when blasting or misting with conforming solvents;

(1) The device shall have internal drainage, a reservoir or sump, and a completely enclosed cleaning chamber, designed so as to prevent any perceptible liquid from emerging from the device; and

(2) The device shall be operated such that there is no perceptible leakage from the device except for incidental drops from drained, removed parts.

[County Rule 331 §307.1]

b) The Permittee shall use a sealed system for all blasting or misting with a non-conforming solvent.

[County Rule 331 §307.2]

c) Cleaning systems using cleaning-solvent that emerges from an object undergoing flushing with a visible mist or at a pressure exceeding 10 psig, shall comply as follows;

(1) For conforming solvents, use a containment system that is designed to prevent any perceptible cleaning-solvent liquid from becoming airborne outside the containment system, such as a completely enclosed chamber.

(2) Use a sealed system for non-conforming solvents.

[County Rule 331 §307.3]

U. Operational Limitations and Standards for Gasoline Storage Tank:

1) The Permittee shall limit gasoline deliveries to less than 120,000 gallons in any 12 consecutive calendar months.

2) For any storage tank with a capacity of more than 250 gallons, the Permittee shall not allow vapor or liquid escapes through a dispensing tank's outer surfaces, nor from any of the joints where the tank is connected to pipe(s), wires, or other system.

3) Each fill-line into a stationary dispensing tank shall be equipped with a permanent submerged fill pipe that has a discharge opening which is completely submerged when the liquid level is 6 inches above the tank bottom.

[County Rule 353 §§305.2, 301, 302]
[SIP Rule 33.3.A] [SIP Rule 353 §301.1]

V. Operational Limitations And Standards For The Operation Of the Horizontal Grinder and the Tub Grinder: The Permittee shall limit the combined hours of operation of the tub grinder engine plus the horizontal grinder engine to no more than 8,000 hours during any rolling 12 month period.

[County Rule 200 §309]

20. MONITORING/RECORDKEEPING:

A. The Permittee shall monitor and maintain accurate records of the following:

1) The temperature at which the flares are operated.

a) The Permittee shall monitor for compliance with the flare emission limits of these permit conditions by continuously monitoring the operating temperature of the flares. The flare temperature shall comply with the limit established in the most recent operation and maintenance (O&M) plan that has been submitted for the Control Officer's approval.

2) The measured landfill gas inlet stream into the flares.

3) Dates of any filters replaced for the filter/condensate knockout drums.

[40 CFR 60 §756(b) applies to A 1) and A 2) above]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]
[Maricopa County Rule 210 §301.4b applies to A.1)a) above]

B. Monitoring for Hydrogen Sulfide: [County Rule 210 §309]

1) If the division or the Permittee logs more than three off-site odor complaints pursuant to Permit Condition 20.O during any four consecutive weeks, the Permittee shall conduct property line monitoring for H_2S within 48 hours of receiving the third complaint or within 48 hours of being notified of the third complaint by the Division. The Permittee shall notify the Division, Attn: Emission Testing Supervisor, by telephone or in writing at least 24 hours in advance of conducting the monitoring.

2) The monitoring shall be performed using a Jerome 631-X (or equivalent approved by the Division) portable hydrogen sulfide gas analyzer with the capability to detect H_2S at concentrations in the parts per billion by volume (ppb_v) range. The analyzer shall be calibrated and operated in accordance with the manufacturer's operating instruction book.

3) Monitoring shall be conducted at a minimum of 12 locations of equal spacing along the property line of the landfill (approximately every ½ mile) and shall be collected from between three and six feet above the ground surface. The monitoring period for each location shall be a period of ten minutes and the period shall begin as soon as possible after the tester arrives at the sampling location.

4) When the tester arrives at a monitoring location, three readings shall be taken at roughly five minute intervals.

If the property line monitoring shows an average H_2S concentration of 0.03 ppmv or higher at any of the monitoring locations the Permittee shall implement a plan to control the H_2S emissions within seven calendar days. Upon implementation of the odor control plan, the Permittee shall monitor property line concentrations weekly until three weeks of data indicate the H_2S emissions have been controlled to 0.03 ppmv or less. The Permittee shall submit to the Division, Attn: Title V Compliance Supervisor, a report of complaints and of actions taken to implement the odor control plan within 14 calendar days of initial sampling.

The control officer reserves the right to require additional monitoring or testing for odoriferous compounds that might reasonably be expected to be emitted from the landfill.

C. After the installation of a collection and control system in compliance with 40 CFR 60 §755, the Permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60 §752(b)(2)(v), using the following equation:

$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$
where,
M_{NOC} = mass emission rate of NMOC, megagrams per year
Q_{LFG} = flow rate of landfill gas, cubic meters per minute
C_{NMOC} = NMOC concentration, parts per million by volume as hexane

1) The flow rate of landfill gas, Q_{LFG}, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of 40 CFR 60.754.
2) The average NMOC concentration, C_{NMOC}, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of 40 CFR 60.754, the minimum list of compounds to be tested shall be those published in the most recent compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill Permittee shall divide the NMOC concentration from Method 25 C of appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.
3) The Permittee may use another method to determine landfill gas flow and NMOC concentration if the method has been approved by the Administrator and the Control Officer.

[40 CFR 60 §754 (b)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

D. Except as provided in 40 CFR 60 §752(b)(2)(i)(B), the following methods shall be used to determine whether the gas collection system is in compliance with 40 CFR 60 §752(b)(2)(ii).
1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60 §752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator and Control Officer. If k has been determined as specified in 40 CFR 60 §754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.
a) For sites with unknown year-to-year solid waste acceptance rate:
$$Q_M = 2L_0R(e^{-kc} - e^{-kt})$$
where,

Q_M = maximum expected gas generation flow rate, cubic meters per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
t = age of the landfill at equipment installation plus the time the Permittee intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years
c = time since closure, years (for an active landfill c = 0 and $e^{-kc} = 1$)

b) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^{n} 2\,k\,L_o M_i \left(e^{-kt_i}\right)$$

where,
Q_M = maximum expected gas generation flow rate, cubic meters per year
k = methane generation rate constant, $year^{-1}$
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of solid waste in the i^{th} section, megagrams
t_i = age of the i_{th} section, years

c) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs (D)(1)(a) and (b) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

2) For the purpose of determining sufficient density of gas collectors for compliance with 40 CFR 60 §752(b)(2)(ii)(A)(2), the Permittee shall design a system of vertical wells, horizontal collectors or other collection devices, satisfactory to the Administrator and Control Officer, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60 §752(b)(2)(ii)(A)(3), the Permittee shall measure gauge pressure in the gas collection header at each individual well, monthly.

4) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the Permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60 §753(c).

[40 CFR 60 §§755 (a)(1), (2), (3) and (5)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

E. The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60 §753(d).

1) After installation of the collection system, the Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and

along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of 40 CFR 60 §755.

2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR60 §755(c)(4)(i) through (v) shall be taken. As long as the specified actions are taken the exceedance is not a violation of the operational requirements of 40 CFR 60 §753(d).
   a) The location of each monitored exceedance shall be marked and the location recorded.
   b) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of reach exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
   c) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. IF the re-monitoring shows a third exceedance for the same location, the action specified in 40 CFR60 §755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR60 §755(c)(4)(v) has been taken.
   d) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in 40 CFR60 §755(c)(4)(ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in 40 CFR60 §755(c)(4)(iii) or (v) shall be taken.
   e) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator and Control Officer for approval.

5) The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[40 CFR 60 §755 (c)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

F. The Permittee seeking to comply with the provisions in 40 CFR60 §755(c) in the above permit conditions, shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices;

1) The portable analyzer shall meet the instrumentation specifications provided in section 3 of Method 21 of appendix A of 40 CFR 60 §755, except that "methane" shall replace all references to VOC.

2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of 40 CFR 60 §755, the instruments evaluation procedures of section 4.4 of Method 21 of appendix A of 40 CFR 60 §755 shall be used.

4) The calibration procedures provided in section 4.2 of Method 21 of appendix A of 40 CFR 60 §755 shall be followed immediately before commencing a surface monitoring survey.

[40 CFR 60 §755 (d)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

G. The provisions of 40 CFR 60 §755 apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

[40 CFR 60 §755 (e)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

H. Except as provided in 40 CFR 60 §752(b)(2)(i)(B), the Permittee of an MSW landfill subject to the provisions of 40 CFR 60 §752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report for which triggered 40 CFR 60 §752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[40 CFR 60 §758(a)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

I. Except as provided in 40 CFR 60 §752(b)(2)(i)(B), the Permittee of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) of 40 CFR 60 §758 as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

1) Where the Permittee is subject to the provisions of 40 CFR 60 §758(b) seeks to demonstrate compliance with 40 CFR 60 §752(b)(2)(ii):

a) The maximum expected gas generation flow rate as calculated in 40 CFR 60 §755(a)(1). The Permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator and Control Officer.

b) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60 §759(a)(1).

2) Where The Permittee is subject to the provisions of 40 CFR 60 §758 seeks to demonstrate compliance with 40 CFR 60 §752(b)(2)(iii) through the use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts;:

a) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

b) The percent reduction of NMOC determined as specified in 40 CFR 60 §752(b)(2)(iii)(B) achieved by the control device.

[40 CFR 60 §758 (b)(1) and (2)]

J. Except as provided in 40 CFR 60 §752(b)(2)(i)(B), the Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60 §756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

[40 CFR 60 §758(c)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

1) The following constitute exceedances that shall be recorded and reported under 40 CFR 60 §757(f):
For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British Thermal Units per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60 §752(b)(2)(iii) was determined.

[40 CFR 60 §758(c)(1)(i)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

2) The Permittee subject to the provisions of 40 CFR 60 §758 shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections or car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60 §756.

[40 CFR 60 §758(c)(2)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

K. Except as provided in 40 CFR 60 §752(b)(2)(i)(B), the Permittee subject to the provisions of 40 CFR 60 §758 shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

1) The Permittee subject to the provisions of 40 CFR 60 §758 shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60 §755(b).

2) The Permittee subject to the provisions of 40 CFR 60 §758 shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60 §759(a)(3)(i), as well as any non-productive areas excluded from collection as provided in 40 CFR 60 §759 (a)(3)(ii).

[40 CFR 60 §758(d)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

L. Except as provided in 40 CFR 60 §752(b)(2)(i)(B), the Permittee subject to the provisions of 40 CFR 60 §§ 750 through 759 shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60 §753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[40 CFR 60 §758(e)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

M. Monitoring for Visible Emissions:

1) The Permittee shall weekly conduct a facility walk-through and observe visible emissions from the following equipment.
   a) Tub grinder with engine(1) – wood grinder
   b) Horizontal grinder with engine (1) – wood grinder
   c) Flares

The Permittee shall log the visual observations, including the date and time when that reading was taken, whether or not visible emissions were present, name of the person who took the reading and any other related information.

[County Rules 300, 210 §302.1(c)(1)]
[SIP Rule 30]

2) If visible emissions are observed from any source capable of emitting any air contaminant, other than uncombined water, to the ambient air, and the facility has not had a compliance status notification or notice of violation of an opacity standard in the 12 months preceding the visual observation, the Permittee shall obtain an opacity reading conducted in accordance with EPA Reference Method 9 by a certified visible emissions (VE) reader. While the emitting equipment is in operation this reading shall be taken within 3 days of the visual observance and taken daily for two weeks during each day of facility operation. A Method 9 reading shall be taken weekly thereafter during each week that the unit is in operation until there are no visible emissions. If no operation occurs in the three days following the visible observation of emissions, then the certified Method 9 reading shall be taken the next day that operation does occur. If the problem is corrected before three days have passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. If the Permittee has had a compliance status notification or notice of violation of an opacity standard in the previous 12 calendar months a Method 9 by a certified visible emission reader must be taken within 1day of

the visual observance and daily until no visible emissions are observed. The Permittee shall log all visual observations including the following:

a) The date and time that a visible observation or Method 9 reading was taken;
b) The name of the person who took the reading;
c) Whether or not visible emissions were present;
d) The opacity of visual emissions determined by a Method 9 reading, if applicable;
e) A description of any corrective actions taken, including date, if applicable; and
f) Any other related information.

[County Rule 210 §302.1(c)(1)] [SIP Rule 31]

3) Opacity Readings

a) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.

[40 CFR 60.11.b][County Rule 300 §§501]

b) Opacity of visible emissions from intermittent sources as defined by County Rule 300§201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300§502] [locally enforceable only]

N. Monitoring for Dust Generating Activities

1) The Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan. The log or the records and supporting documentation shall be made available to the Control Officer within 48 hours, excluding weekends, from written or verbal request. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 310 §502] [County SIP Rule 310 §502]

2) Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310 §503] [County SIP Rule 310 §503]

3) The following test methods shall be used as appropriate.

a) Dust Generating Operations: Opacity observations of a source engaging in dust generating operations shall be conducted in accordance with County Rules Appendix C, Section 3 (Visual Determination Of Opacity Of Emissions From Sources For Time-Averaged Regulations) of County Rule 310, except opacity observations for intermittent sources shall require 12 rather than 24 consecutive readings at 15-second intervals for the averaging time.

[County Rule 310 §501.1(a), Appendix C Section 3]
[County SIP Rule 310 §501.1(a), Appendix C Section 3]

b) Unpaved Haul/Access Road: Opacity observations of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for unpaved Roads and Unpaved Parking Lots of the County Rules.

[County Rule 310 §501.1(c), Appendix C Section 2.1]
[County SIP Rule 310 §501.1(c), Appendix C Section 2.1]

c) Unpaved Haul/Access Road: Stabilization observations for unpaved haul/access roads (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for unpaved Roads and Unpaved Parking Lots of the County Rules. When more than 1 test method is permitted for a determination, an exceedance of the limits, established in this rule, determined by any of the applicable test methods constitutes a violation of the County Rules.

[County Rule 310 §501.2(b), Appendix C Section 2.1]
[County SIP Rule 310 §501.2(b), Appendix C Section 2.1]

O. The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[County Rule 210 §302.1.c.(2)] [locally enforceable only]

P. The Permittee shall comply with the following requirements in General Conditions and shall be made availabe to the Control Officer upon request.

1) Maintain a current list of cleaning solvents; state the VOC content of each in pounds VOC per gallon of material or grams per liter of material.
2) Any cleaning-solvent used that is subject to the vapor-pressure limits of County Rule 331 §304.1 shall have on site the written value of the total VOC vapor-pressure of each such solvent in one of the following forms:
   a) A manufacturer's technical data sheet,
   b) A manufacturer's material safety data sheet (MSDS), or
   c) Actual test results.
3) Recordkeeping Requirements for Cleaning Solvent Usage:
   a) Monthly Record keeping Requirements:
   The Permittee shall maintain monthly records of the amount of cleaning-solvent used shall be updated by the end of month for the previous month. Show the type and amount of each make-up and all other cleaning-solvent to which Rule 331 is applicable.
   b) Annual Recordkeeping Requirements:
   Use of concentrate that is used only in the formulation of Low VOC Cleaner shall be updated at least annually.
   The Permittee need not keep a record of a cleaning substance that is made by diluting a concentrate with water or non-precursor compound(s)

to a level that qualifies as a Low VOC Cleaner if records of the concentrate usage are kept in accordance with permit condition 2 above.

c) Grouping by VOC Content:
For purposes of recording usage, the Permittee may give cleaning solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all the products in that group are then recorded under just one name. (In such a case, the operator must also keep a separate list that identifies the product names of the particular solvents included under the group name). To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10^{th} of a pound of VOC per gallon of material, or to the nearest gram per liter of material.

[County Rule 331 §501]
[SIP 331 §501]

Q. Gasoline Storage Tank

1) The Permittee shall maintain accurate records showing the quantity of all gasoline delivered to the facility. The records will include total gasoline received each month and the 12 month rolling total.

2) The Permittee shall conduct and record an inspection each time the submerged fill pipe is reinstalled. This inspection will be performed to monitor compliance with the file pipe length requirements of these permit conditions. The records shall indicate each fill pipe removal, date of replacement and the date and result of the follow up inspection.

[County Rule 210 §302.1 c. (2)]
[County Rule 353 §502]
[SIP Rule 353 §502]

R. Monitoring Requirements For The Horizontal Grinder and the Tub Grinder:
The Permittee shall keep monthly records of the run time for both the tub grinder engine plus the horizontal grinder engine. The Permittee shall calculate the rolling 12 month hours of operation for the grinder engines monthly.

[County Rule 200 §309]

21. REPORTING:

Please note: There are additional reporting requirements in the Standard Permit Conditions listed above.

A. The Permittee of a controlled landfill shall submit a closure report to the Administrator and Control Officer within 30 days of waste acceptance cessation. The Administrator and Control Officer may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258 §60. If a closure report has been submitted to the Administrator and Control Officer, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[40 CFR 60 §757(d) and 40 CFR 60 §752(b)(ii)(B)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

B. The Permittee of a controlled landfill shall submit an equipment removal report to the Administrator and Control Officer 30 days prior to removal or cessation of operation of the control equipment.

1) The equipment removal report shall contain all the following items:
   a) A copy of the closure report submitted in accordance with paragraph (d) of 40 CFR 60 §757;
   b) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
   c) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.
2) The Administrator and Control Officer may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60 §752(b)(2)(v) have been met.

[40 CFR 60 §757(e)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

C. The Permittee shall include the following in each semi-annual Compliance Report:

1) The Permittee shall file semiannual monitoring reports with the Control Officer, Attn: Large Source Compliance Supervisor. The initial reporting period shall begin on the permit issuance date and shall cover a period of 6 months or less. The second and subsequent reporting periods shall be in 6 month intervals after the end of the initial reporting period. The semiannual monitoring reports shall be filed within 30 days after the end of the reporting period. Each report shall cover all instances of deviations from these permit conditions during the reporting period, the cause of the deviations if any were present, and any applicable corrective actions taken. The monitoring report shall also contain the following information at a minimum:
2) Visible emission observations:
   a) Dates on which visible emissions observations were taken;
   b) Name of the observer;
   c) Whether or not visible emissions were present;
   d) The opacity of visual emissions determined by a Method 9 reading, if applicable;

e) A description of any corrective actions taken, including date taken, if applicable; and
f) Any other related information.

[County Rule 210 §302.1 e (1)]
[SIP Rule 30]

3) The Permittee shall include a copy of the portion of the odor log, which covers the applicable 6 month reporting period in each of the semiannual compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.

[County Rule 210 §302.1.e.(1)][locally enforceable only]

The Permittee shall also include a copy of the most current hydrogen sulfide monitoring report in the semiannual compliance report.

a) The date the hydrogen sulfide monitoring test was done;
b) Name of the tester;
c) Name of monitoring device;
d) Whether or not hydrogen sulfide emissions were present and if present state the concentration;
e) A description of any corrective actions taken, including date taken, if applicable; and
f) Any other related information.

[County Rule 200 §309]

4) The Permittee shall include the following information in each semi-annual compliance report;

a) A summary of the listed cleaning-solvents currently used at the facility and state the VOC-content of each in pound per gallon of material or grams per liter of material;
b) The quantity of each cleaning solvent used during the reporting period;
c) Certify that monthly recordkeeping was performed as directed in the monitoring/recordkeeping requirements section; and
d) Any new or updated material safety data sheets (MSDS) that may have been obtained during the period.

[County Rule 210 302.1.e.(1)]

5) Gasoline Storage Tanks

The Permittee shall include the following in each Semi-annual compliance report:

a) a summary of the monthly and 12-month rolling total gasoline delivery records; and
b) date of fill pipe reinstallation and result of follow up inspection.

[County Rule 210 §302.1 e. (1)]

6) Material Containment

The Permittee shall file a semi-annual compliance report to the Division with attention to: Large sources Compliance Supervisor containing dates when the requirements of these Permit Conditions regarding daily cover were not followed, reason for non-compliance and description of alternative actions taken.

[County Rule 210 §302.1.e.(1)]

D. Odor Monitoring
The Permittee shall submit the records for any property line H2S monitoring required by these Permit Conditions and summary of the odor complaint log if any complaints were received during the reporting period to the Division, Attention: Large Source Compliance Supervisor, within 14 business days of the completion of the required monitoring.

[County Rule 210]

E. Except as provided in 40 CFR 60 §752(b)(2)(i)(B), the Permittee subject to the requirements of this 40 CFR 60 §757(b) shall submit an NMOC emission rate report to the Administrator and Control Officer initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of 40 CFR 60 §757(b). The Administrator and Control Officer may request such additional information as may be necessary to verify the reported NMOC emission rate.

[40 CFR 60 §757(b)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

F. Reporting Requirements for the Environmental Protection Agency Administrator:
The Permittee of a landfill seeking to comply with 40 CFR 60 §752(b)(2) using an active collection system designed in accordance with 40 CFR 60 §752(b)(2)(ii) shall submit to the EPA Administrator an annual report. The annual report shall include the following recorded information. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60 §758(c).

1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60 §756(a), (b), and (c).
2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60 §756.
3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
4) All periods when the collection system was not operating in excess of 5 days.
5) The location of each exceedance of the 500 part per million methane concentration as provided in 40 CFR 60 §753(d) and the concentration as provided in 40 CFR 60 §753(d) and the concentrations recorded at each location for which an exceedance was recorded in the previous month.
6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of 40 CFR 60 §755.

[40 CFR 60 §757(f)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

G. The Permittee shall include the following information with any performance test report on the enclosed flares:

1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas

extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area; and
5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
6) The provisions for the control of off-site migration.

[40 CFR 60 §757(g)]
[Maricopa County Rule 360 §301.74]
[Maricopa County Rules 200 §309 and 321 §301 (locally enforceable only)]
[County Rule 210 302.1.e.(1)]

22. TESTING:

A. The Permittee shall conduct an emissions test for NMOC destruction efficiency as well as for the NOx and CO emission rates on the flares at least once within the 5 year term of this permit and if requested by the Control Officer. Testing shall be performed for the flare exhaust system in accordance with test methods specified in 40 CFR 60 §754(d) or other test procedure(s) approved by the EPA Administrator and the County Control Officer. The Permittee shall also conduct an emission test for PM10 on the flares at least once within the five year term of this permit. The Permittee shall use EPA Method 201A to determine the PM10 emission. As an alternative, the Permittee may use EPA Method 5 to test for PM and assume PM = PM10. In addition to Methods 201A or 5, the Permittee shall also perform Method 202 to determine the condensable particle emissions.

Alternative testing methods may be approved by the Control Officer as provided for in County Rule 270 §301.4.

[Maricopa County Rule 200 §309][County Rule 270 §§301 and 402]

B. The Permittee shall submit a test protocol to the Department for review and approval at least 30 days prior to the emissions tests for the approved control system using test methods specified in 40 CFR 60 §754(d) or in subsection A. of this permit condition. A fee for the emissions testing from the flare, as required by Maricopa County Rule 280, shall be submitted with the test protocol.

[Maricopa County Rules 200 §309, 270, and 280]

C. The Permittee shall notify the Division in writing at least two weeks in advance of the actual time and date of the emissions tests so that the Department may have a representative attend.

[Maricopa County Rule 270 §404]

D. The Permittee shall complete and submit a report to the Department within 60 days after completion of the emissions tests. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made.

[Maricopa County Rule 270 §400]

E. For the required NMOC emissions test, Method 25, 25C, or Method 18 of Appendix A 40 CFR Part 60 must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator and Control Officer as provided by 40 CFR 60 §752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 15A should be used in place of Method 25. If using Method 19 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = \left\{ \frac{(\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}})}{\text{NMOC}_{\text{in}}} \right\}$$

where,

$NMOC_{in}$ = mass of NMOC entering control device

$NMOC_{out}$ = mass of NMOC exiting control device

[Maricopa County Rules 200 §309 and 360 §301.74]
[Maricopa County Rule 321 §301 (locally enforceable only)]

23. OTHER (IF APPLICABLE):

Dust Control Plan Requirements:

A. The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operation. The Dust Control Plan shall describe all control measures to be implemented before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. The Plan shall include at least all the information contained in County Rule 310 §304. At least one primary control measure and one contingency control measure must be identified from Table 1 of County Rule 310.

[County Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]
[County SIP Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

B. Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of County Rule 310, even if the Permittee is complying with the approved Dust Control Plan.

[County Rule 310 §§303.1 and 306] [County SIP Rule 310 §§303.1and 306]

C. If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits from this permit condition, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.

[County Rule 310 §305] [County SIP Rule 310 §305]

D. If any changes to a Dust Control Plan, associated with a Title V Permit, are necessary as a result of the most recent revisions of County Rule 310, then the Permittee shall submit a revised Dust Control Plan to the Control Officer, according to the minor permit revision procedures describe in County Rule 210, no later than 6 months after the effective date of the most recent revisions to County Rule 310.

[County Rule 310 §402.2] [County SIP Rule 310 §402.2]

APPENDIX A – PROCESS AND EQUIPMENT LIST

A. Permitted Processes and Equipment
   1) Landfill
      a) Gas Collection and Control:
      An active landfill gas collection system working under vacuum removes the landfill gas from the landfill mass and the surrounding soil formation. There are two Flare Stations.

Flare Station 1, known as FS1, currently has a total of 4 flares.

Flare Station 1 (Flare Stack Labels)	Minimum Allowable Operating Temperature (°F)	Maximum Allowable LFG Inlet Stream (SCFM)
FS1-1	1,400	2,200
FS1-2	1,400	2,200
FS1-3	1,400	2,200
FS1-4	1,400	1,650

Flare Station 2, known as FS2, currently has a total of 2 flares.

Flare Station 2 (Flare Stack Labels)	Minimum Allowable Operating Temperature (°F)	Maximum Allowable LFG Inlet Stream (SCFM)
FS2-1	1,400	1,320
FS2-2	1,400	1,320

      b) Leachate Collection System:
      The leachate collection system is installed over lined portions of the facility to remove the leachate. The collection system consists of liner, a sump, collection pipe, a riser pipe, and a submergible pump for discharge of leachate collected in the sump.
      (1) Cells 1, 2, and 3, and a portion of 4, do not have a leachate collection or liner system.
      (2) Cells 4, 5, 6 include liner and leachate collection systems.

   2) 1,000 gallon gasoline tank
   3) Tub grinder with engine(1) – wood grinder
   4) Horizontal grinder with engine (1) – wood grinder
   5) Solvent degreaser.

B. Additional Equipment not requiring permitting
   6) 10,000 gallon diesel fuel tank
   7) mobile equipment

Technical Support Document (TSD)
City of Phoenix – Skunk Creek Landfill
3165 West Happy Valley Road
Application Number: V97-019
January 23, 2003

1. GENERAL FACILITY OVERVIEW:

The City of Phoenix Skunk Creek Landfill (SCL) consists of approximately 686 acres of land, of which approximately 423 acres have been dedicated to municipal refuge disposal. The landfill opened in 1972. SCL receives residential and commercial wastes, and construction debris.

The estimated closure date for the landfill is 2006. At that time, the total site disposal volume will be an estimated 19 million tons.

The City of Phoenix Skunk Creek Landfill (SCL) is classified by New Source Performance Standards as a categorical source and is subject to NSPS and Title V regulatory requirements.

Skunk Creek has installed an active collection and control system for Non-Methane Organic Compounds (NMOCs). The source submitted a design plan for the collection and control system in September 1996. The collection and control system plan was approved by MCESD on March 10, 1997.

2. EMISSION UNIT/PROCESS DESCRIPTION:

A. Dust Generating Activities:
The SCL was designed using an area fill method. Excavated soils are used for daily and intermediate cover, and construction of perimeter berms, final cover, roadways, and dikes. Solid wastes are disposed of by spreading in thin layers and compacted to the smallest practical volume. Compacted waste is covered each day with soil or approved alternate daily cover.

B. Gas Collection and Control:
An active landfill gas collection system working under vacuum removes the landfill gas from the landfill mass and the surrounding soil formation. There are two enclosed flare stations. Flare Station 1, known as FS1, currently has a total of 4 flares. Flare Station 2, known as FS2, currently has a total of 2 flares. Both Flare Stations operate 24 hours/day, 365 days/year.

C. Leachate Collection System:
1) The leachate collection system is installed over lined portions of the facility to remove the leachate. The collection system consists of liner, a sump, collection pipe, a riser pipe, and a submergible pump for discharge of leachate collected in the sump.
2) Cells 1, 2, and 3, and a portion of 4, **do not have a leachate collection or liner system**.
3) Cells 4, 5, 6 include liner and leachate collection systems.

D. Green Waste Grinding Operations
There are two green waste grinding machines each with a diesel-powered engine.
1) Tub Grinder: The tub grinder is a stand-alone unit used for grinding green waste into smaller pieces. The maximum tub capacity is approximately 10 tons per hour.
2) Horizontal Feed Grinder: The horizontal feed grinder is a stand-alone unit used for grinding green waste into smaller pieces. The maximum tub capacity is approximately 10 tons per hour.

E. Additional Information:
1) The source does not have process boilers or heaters.
2) The source does not accept asbestos as waste into the landfill.

3. SOURCE SPECIFIC APPLICABLE REQUIREMENTS:

A. Federal Requirements (source specific):

40 CFR WWW is applicable to the source. Within 40 CFR WWW, Rules 40 CFR 60 §§752 through 759 are wholly or partially applicable to the source.

3) 40 CFR 60 §752: Standards for air emissions from municipal solid waste landfills.
4) 40 CFR 60 §753: Operational standards for collection and control systems.
5) 40 CFR 60 §754: Test methods and procedures.
6) 40 CFR 60 §755: Compliance provisions.
7) 40 CFR 60 §756: Monitoring and operations.
8) 40 CFR 60 §757: Reporting requirements
9) 40 CFR 60 §758: Recordkeeping requirements.
10) 40 CFR 60 §759: Specifications for active collection systems.

B. SIP Rule 32

SIP Rule 32 §F

A screen model was run for Skunk Creek Landfill to determine if they exceeded the emission concentration for Sulfur Dioxide (SO_x) in SIP Rule 32 (see table 1)

Table 1: SO_x Emission Limits from SIP Rule 32

Concentration of SO_x	*Averaging Time*
850$\mu g/m^3$	*1 hour*
250$\mu g/m^3$	*24 hour*
120$\mu g/m^3$	*72 hour*

The results of the SCREEN3 Air Emissions model performed for Skunk Creek Landfill are listed below. The following information was provided to the source to ensure they would be able to determine compliance. It is important to know that SCREEN3 is not specific to chemical/pollutant species and can be used for any pollutant coming out of the stack modeled.

The maximum concentration of sulfur oxides predicted was 14.47 micrograms/cubic meter at a distance of 4880 meters from the flare station.

The simple terrain inputs used in the SCREEN3 model for SO_x are listed below.
Simple terrain inputs:

1) A point source type was used assuming emissions would be generated from a flare.
2) The emission rate used was 14.1 grams/second. The emission rate was calculated based on the following:
3) 1700 lb/year of emissions.
4) Operation of the flare was assumed to be 365 days/year, 24 hours per day.
5) Stack height = 9.45 meters (from Title V permit application).
6) Stack inside diameter = 3.125 meters (from Title V permit application).
7) Stack exit velocity = 95.94 meters/second (from 356,000,000 cu.ft. /yr converting to metric units and then dividing by the area of the exhaust duct).
8) Stack exit temperature = 1034 K = 1400 F (from Title V permit application).
9) Ambient air temperature = 297 K = 75 F.
10) Receptor height = 2 meters
11) The urban model was used presuming a more conservative estimate since potential impacts are so far below threshold limits.

SIP Rule 32 §G

Process and process equipment are defined in SIP Rule 2 as, "any activity, operation or treatment involving the use of any machine, equipment, device or other article…" A landfill does not meet the definition of a process therefore, Rule 32 §K does not apply.

C. County State Implementation Plan (SIP) Requirements (source specific)
Rule 30, Rule 31, Rule 310, Rule 32, and Rule 331

D. Maricopa County Requirements (source specific)
Rule 200, Rule 210, Rule 300, Rule 310, Rule 320, Rule 321, Rule 331, and Rule 360

4. DISCUSSION OF NON-APPLICABLE REGULATIONS

A. SIP Rule 70 is not applicable to sources. The source initially thought this was applicable. Research of the rule provided the following interpretation, SIP Rule 70 does not apply to sources, unless they are making a significant modification to the site. The rule is intended to apply to impacts to the air shed as a whole. If a source were to make a change that would impact the air shed then this rule might be applicable to them.

B. County Rule 311 Particulate Matter from Process Industries. This rule's limitations on fuel burning equipment are not applicable to the source's grinder engines and flares. The engines are nonroad engines and therefore this permit can't control their emissions [Clean Air Act §209(e)(1), (e)(2)(B)]. The flares are control equipment, and not process equipment. The flares are subject to monitoring, recordkeeping and testing requirements as required by other applicable rules.

5. DISCUSSION OF APPLICABLE PERMIT CONDITIONS

Allowable Emissions

1) **Permit Conditions 18 A**: The source did not request an increase in emission limits. Emission limits previously established were added unchanged to these permit conditions.
2) Opacity Limits
   a) **PERMIT CONDITION 18 D**: SIP Rule 30 restricts visible emissions from any plume or effluent from any source of emissions, other than uncombined water, to 40 percent opacity.
   b) **PERMIT CONDITION 18 E**: County Rule 300 restricts visible emissions from any source to 20% opacity, other than emissions from uncombined water.
   c) **PERMIT CONDITION 18 E**: County Rule 310 restricts visible fugitive dust emissions to 20% opacity. It also provides the source with an affirmative defense if there is a violation of the opacity limit due to a wind event.

6. OPERATIONAL LIMITS AND STANDARDS:

These permit conditions provide constraints for various operating parameters of the control device and also the active collection system.. By setting constraints on the range(s) of the operating parameters, emissions quantities of PM_{10} and NMOCs are limited to meet regulatory requirements.

1) Emission Limits:
   Sulfur Oxides (SO_x) were not included in these permit conditions because the source's PTE emissions of SO_x are approximately 22 TPY which is well below the applicable required threshold.
2) Control Device:
   a) **PERMIT CONDITION 19 A 1** is an installation permit condition[i] that establishes the PM_{10} removal efficiency passing through the filter/condensate drums.

b) **PERMIT CONDITION 19 A 2** is an installation permit condition[1] that:
   (1) Ensures that the flare is properly functioning.
   (2) Establishes the minimum destruction temperature and removal efficiency requirements for the flare system.

c) The quantity of NMOC emissions are reduced as a result of permit conditions 19 A 1 and 19 A 2.

3) Active Collection System:
   a) **PERMIT CONDITION 19 B** is an installation permit condition[ii] that sets requirements to ensure the landfill is designed to meet the maximum capacity of landfill gas generated.
   b) **PERMIT CONDITION 19 B 1 through 4** are installation permit conditions[2] that set requirements to ensure the landfill gas is routed and collected at a sufficient rate, within a given time frame from appropriate areas of the landfill and that off-site migration of subsurface gas is mitigated.

4) **PERMIT CONDITION 19 C:** Passive Collection System: This was an installation permit condition so it was retained.[2]

5) **PERMIT CONDITION 19 D** are a set of installation permit conditions[2] which cover several different aspects associated with the design requirements for the landfill gas (LFG) collection and control system.

   PERMIT CONDITION 19 D 1:
   (1) Establishes emission limits for the flares
      (a) Outlet emissions must be reduced by 98 weight percent of NMOC; or
      (b) Emissions outlet concentration is < 20 ppm_v of NMOC.
   (2) The initial performance test has already been performed, these permit conditions modified the installation permit conditions by removing the initial performance test requirements. In order to ensure the flares are meeting the required removal efficiency or outlet concentration, compliance performance testing is included in the testing section Permit Condition 22 A.

   PERMIT CONDITION 19 D 2: Requires the source to operate the control device within the ranges it was last tested.

6) **PERMIT CONDITION 19 F** addresses landfill closure requirements. The anticipated closure date for Skunk Creek Landfill is within the 5-year time frame of these permit conditions. Closure is anticipated in 2006. permit condition 19 F provides a maximum emission limit for NMOC over a three-year period the source must meet prior to closure. In addition, it addresses closure requirements for reporting.

PERMIT CONDITION 19 G This section addresses the operating requirements of the collection and control system.

a) Several of the subsections of permit condition 19 G restrict various gas concentration limits both within the LFG collection and control system and the ambient air. References for various test methods are cited to ensure appropriate test methods are used when determining compliance.
b) In the event of the collection and control system is inoperable permit condition 19 G 5 establishes a time frame in which various shutdown activities must be completed.

7) **PERMIT CONDITION 19 H and J** address abnormal operating conditions and establish time frames for addressing the issue that caused a deviation from normal operation.
8) **PERMIT CONDITION 19 L** establishes equipment specifications to demonstrate that the collection system is operating in compliance with design and performance requirements.
9) **PERMIT CONDITION 19 M** establishes equipment specifications to demonstrate that the control system is operating in compliance with design and performance requirements.
10) **PERMIT CONDITION 19 N** establishes a monitoring procedure for both operating and closed landfills to demonstrate compliance with the surface methane operational standard of "less than 500 ppm above background at the surface of the landfill".[iii]
11) **PERMIT CONDITION 19 O** requires the Permittee to comply with the approved collection and control plan and the elements specified for active collection system in 40 CFR 60 §759.
12) **PERMIT CONDITION 19 P:** establishes provisions to demonstrate compliance for stabilization of fugitive dust.
    a) Visible emissions are restricted to less than 20 percent opacity for unpaved haul/access roads, unpaved parking lots and either;
        (3) less than 0.33 oz/ft^3 silt loading; or
        (4) less than or equal to 6% silt content.
    b) An alternative for meeting stabilization requirements for unpaved haul/access roads the Permittee can limit the number of vehicle trips to no more than 20 per day and limit vehicle speed to no more than 15 miles per hour.
13) **PERMIT CONDITION 19 P 2**: Skunk Creek Landfill is required to implement various control measures and work practices to restricts dust emissions. The control measures restrict visible emissions to 20 percent opacity and establish stabilization requirements for dust generating operations. The control measures and work practices are in permit condition 19 R.
14) **PERMIT CONDITION 19 P 3** requires the immediate implementation of the contingency control measure should any primary control measures(s) in an approved Dust Control Plan prove ineffective.
15) **PERMIT CONDITION 19 P 4** provides various work practices that restrict fugitive dust emissions from specific activities. Those activities are:
    a) Bulk Material hauling/Transporting **Off-Site Onto Paved Public Roadways**
    b) Bulk Material Hauling/Transporting **On-Site** Within The Boundaries Of The Work Site: When **crossing a public roadway** upon which the public is allowed to travel while construction is underway:
    c) When **On-Site** Hauling/Transporting Within The Boundaries Of The Work Site But **Not Crossing A Public Roadway** Upon Which The Public Is Allowed To Travel While Construction Is Underway:
    d) Bulk Material Handling Operations And Open Storage Piles:
        (5) During Stacking, Loading, And Unloading Operations:
        (6) When Not Conducting Stacking, Loading, And Unloading Operations:
    e) Open Storage Piles:
    f) Spillage, Carry-Out, Erosion, and/or Trackout:
    g) Unpaved Parking Lots: The Permittee shall implement one or more of the following control measures:
    h) Earthmoving Operations On Disturbed Surface Areas 1 Acre Or Larger: If water is the chosen control measure, operate water application system (e.g., water truck) while conducting earthmoving operations on disturbed surface areas 1 acre or larger.
    i) Weed Abatement By Discing Or Blading:

j) Vehicle Use In Open Areas And Vacant Lots:

16) **PERMIT CONDITION 19 Q**: This permit condition restricts the Permittee from emitting gaseous or odorous air contaminant emissions.

17) **PERMIT CONDITION 19 T**: This permit condition addresses the operational limitations and standards for solvent cleaning.
   a) 19 T 1: addresses solvent handling requirements for both wipe cleaning operations and degreasing operations
   b) 19 T 2 and 3 establish the operational and equipment requirements for solvent cleaning machines.
   c) 19 T 4 establishes specific operating and signage requirements for solvent cleaning machines.
   d) 19 T 5 establishes solvent specification requirements.

18) **PERMIT CONDITION 19 U**: Addresses the operational limitations for gasoline storage tanks. SCLF has a 1,000 gallon gasoline storage tank on site.

19) **PERMIT CONDITION 19 V** establishes a limit on the hours of operation for the tub and horizontal grinder combustion engines. Monitoring and record keeping requirements have been added to the permit as a mechanism to show the source meets the permit requirements. The hours of operation limitation was placed on the source to limit NOx emissions.

7. MONITORING/RECORDKEEPING:

A. **PERMIT CONDITION 20 A**: Skunk Creek Landfill has a total of 6 flares used to minimize NMOC emissions. There are federal (40 CFR 60 §754 (b)) and local (Maricopa County Rules 321 §301 and 360 §301.74) monitoring and recordkeeping requirements which are addressed here. The monitoring and record keeping requirements will provide documentation demonstrating how the collection and control system is operated. This requirement is necessary to ensure that the permit conditions are enforceable. Parameters to be recorded are the temperature at which the flares are operated, the landfill gas inlet stream flowrate into the flares, dates of any filters replaced for the filter/condensate knockout drums.

C. **PERMIT CONDITION 20 B** addresses monitoring and recordkeeping requirements for Hydrogen Sulfide emissions.

D. **PERMIT CONDITION 20 C** establishes the criteria for calculating the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60 §752(b)(2)(v).

E. **PERMIT CONDITION 20 D** establishes the methods used to determine whether the gas collection system is in compliance with 40 CFR 60 §752(b)(2)(ii).

F. **PERMIT CONDITION 20 E** establishes the procedures used for determining compliance with the surface methane operational standard as provided in 40 CFR 60 §.753(d).

G. **PERMIT CONDITION 20 F** establishes instrumentation specifications and procedures for surface emission monitoring devices used to demonstrate compliance with the surface methane operations standard (40 CFR 60.755(c)).

H. **PERMIT CONDITION 20 G** establishes provisions for of start-up, shutdown, or malfunction periods, with the provision that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

I. **PERMIT CONDITION 20 H, I, J and L** establish which records, reports, vendor specifications, collection and control device operating parameters, , collection and control device

operating periods, and collection and control device exceedances will be retained by the Permittee. Record retention and accessibility requirements are also defined.

J. **PERMIT CONDITION 20 K** requires the Permittee keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
K. **PERMIT CONDITION 20 M,** establishes procedures, recordkeeping and logging requirements regarding observations of visible emissions.
L. **PERMIT CONDITION 20 N** establishes the requirements for a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan and the retention requirements for the dust control plan and any supporting records.
M. **PERMIT CONDITION 20 P** establishes the requirement for maintaining monthly records of the amount of each cleaning-solvent used
N. **PERMIT CONDITION 20 Q** establishes the recordkeeping and inspection requirements for SCLF's gasoline storage tank.

8. REPORTING:

A. **PERMIT CONDITION 21 A** establishes that a closure report is to be submitted to the Administrator and Control Officer within 30 days of waste acceptance cessation.
B. **PERMIT CONDITION 21 B** Establishes the reporting procedure should the Permittee wish to cease operation or to remove control equipment The reporting procedure includes timelines and report content requirements.
C. **PERMIT CONDITION 21 C** establish content to be included and procedures for writing and submitting the semi-annual Compliance Report. Permit condition 21 C 5 establishes reporting requirements for gasoline contaminated soil. SCLF does not accept gasoline contaminate soil. This permit condition addresses the contingency of contamination by equipment used at the site. Permit condition 21 C 6 establishes reporting requirements for material containment.
D. **PERMIT CONDITION 21 D** establishes reporting requirements for odor monitoring records.
E. **PERMIT CONDITION 21 E** addresses the annual NMOC Emission Rate Report.
F. **PERMIT CONDITION 21 F** addresses the submittal of the semi-annual report: The reporting requirements for the Maricopa County Environmental Services Control Officer require the Permittee to submit a semiannual report within 30 days of the end of the 6-month period to the Division *(Attention: Large Sources Compliance Supervisor)*. The EPA requires the same report annually.
G. **PERMIT CONDITION 21 G** establishes performance test report requirements.

9. TESTING:

PERMIT CONDITION 22 A addresses the emissions testing requirements for NMOC destruction efficiency as well as for the NOx and CO emission rates on the flares upon request from the Control Officer or at least once within the 5 year term of this permit. The citation of 40 CFR requiring initial testing at start up was removed since initial testing has already been done on the flares. If any new flares are installed a permit modification and an O&M Plan and initial testing is required. (The testing time frame requirement was also changed from within 60 days of startup to upon request of the Control Officer).

[40 CFR 60 §752(b)(2)(iii)(B), 40 CFR 60 §8]
[Maricopa County Rule 200 §309]

PERMIT CONDITION 22B, C and D address the following:

1) 22B requires the submittal if a test protocol to the Department for review and approval at least 30 days prior to the emissions test for the approved control system using test methods

specified in 40 CFR 60 §754(d). A fee for the emissions testing from the flare, as required by Maricopa County Rule 280, shall be submitted with the test protocol.

2) 22C require two weeks advanced notify in writing of the actual time and date of the emissions test.
3) 22 D establishes when the results from the test report are to be submitted.

PERMIT CONDITION 22 E establishes performance test method required demonstrating compliance with federal requirements (40 CFR 60 §.752(b)(2)(iii)(B)) of 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator and Control Officer. It also establishes which methods to use to determine oxygen for correcting the NMOC concentration as hexane to 3 percent and provides an alternative method if concentrations are not within the required range for the test method.

PM and PM10 TESTING

Testing of PM10 is necessary to show compliance with the limit of this permit. The facility's flares will be emitting PM10. Exposure to this pollutant has been determined by the USEPA to adversely affect human health.

The test method to be used is 201A in conjunction with 202, EPA approved test methods, or as an alternative to Method 201A the source may use Method 5 to determine Total PM and assume that all PM is PM10. These test methods have been shown to produce scientifically acceptable results.
These test methods have been shown to be technically feasible.
These test methods have shown to be reasonably accurate.

After examining the estimated cost of the test, the Department believes that the cost of a stack-sampling test of the control device performance is reasonable to determine the effectiveness of the control device, to establish a base line of emissions, to avoid potential fines, to establish parametric monitoring, to demonstrate adequacy of a maintenance program on equipment or controls, to provide emissions rate information for possible future PSD/NSR modeling requirements.

10. OTHER (IF APPLICABLE):

Dust Control Plan Requirements are discussed in the permit conditions.

11. APPENDIX A: PROCESS AND EQUIPMENT LIST

[i] Permit Conditions are from "*COP SKUNK CREEK LANDFILL Permit number 96-0866 Revised 3-10-97*"
[ii] Permit Conditions are from *"COP SKUNK CREEK LANDFILL Minor Modification 5-22-00-01, dated 6-14-00."*
[iii] 40 CFR 60 §753(d)